

REMARKS

The above amendment to Claim 1 serves to further narrow the scope of the invention. Applicants have now defined both the process claimed and the mixture in step (A) with "consisting of" instead of "consisting essentially of" language. In addition, the third component of the cellular composites has been further defined with consisting of language. The present invention of Claim 1 is now clearly limited to a process of the presently required steps and forms a cellular composite which consists of the three specifically identified components (i.e. a polyisocyanate, water and inorganic hollow microspheres). New Claim 10 is supported by original Claim 1 and the original specification on page 5, lines 10-13. Applicants respectfully submit that no new matter has been added by these amendments.

Rejection under 35 U.S.C. 103(a)

Claims 1 and 4-9 were rejected under 35 U.S.C. 103(a) as being unpatentable over the Cioca et al reference (U.S. Patent 4,380,474) in view of the Markusch et al reference (U.S. Patent 3,965,051).

The Cioca et al reference discloses polyisocyanate reaction products of polyisocyanates and tanned leather scrap. These reaction products are described as having comparable integrity, workability and economic advantage as, for example, chip board or particle board. (See column 1, lines 59-63.) Tanned leather scrap as required by the Cioca et al reference refers specifically to by-products of leather production, and includes the (chrome) shavings and trimmings of a tanned leather resulting from the manufacture of a leather product. (see column 2, lines 11-14.)

Composite materials that comprise inorganic or organic particles or fibers, bonded together with an organic polyisocyanate which contains ionic groups are disclosed by the Markusch et al reference (column 2, lines 50-55). Suitable polyisocyanates are those which contain ionic groups. Processes of preparing these ionic groups containing polyisocyanates are disclosed at column 4, line 1 through column 9, line 13. The composite materials of this reference are suitable for filling cracks, joints, etc., as well as for making panels and other products for the building industry.

Applicants respectfully submit that the presently claimed invention is not obvious to one of ordinary skill in the art upon reading this combination of references.

It is respectfully submitted by Applicants that this combination of references does not fairly suggest the presently claimed invention to one of ordinary skill in the art. The present claim language of Claims 1-9 clearly eliminates additional process steps and/or additional components in the cellular composites of the present invention.

As previously set forth by Applicants, the process of the Cioca et al reference comprises reacting a polyisocyanate and chrome shavings. The chrome shavings are by-products of leather production resulting from the manufacture of leather goods (column 2, lines 11-14). The chrome shavings (i.e. scrap leather) are required by the Cioca et al reference. See column 2, lines 3-5; column 3, lines 41-50 and column 4, lines 19-30

A broad list of materials suitable for the particular and/or fibrous component of the invention therein is disclosed by the Markusch et al reference. These materials include, for example, various inorganic or organic substances in the form of powder, granules, wire, fibers, crystallites, spirals, rods, solid beads, hollow beads, non-woven webs, woven and knitted fabrics, tapes, etc, of materials such as dolomite, chalk, clay, asbestos, basic silicic acids, sand, talcum, ion oxide, alkali metal silicates, zeolites, calcium silicates, calcium sulfates, cements, glass fibers, carbon fibers, graphite, carbon black, silicon powder, expanded clay particles, hollow glass beads, glass powder, lava, pumice, sawdust, wood meal, cork, coke, etc. (See column 9, line 19 through column 10, line 6.)

The Examiner's position is that "it would have been obvious for one having ordinary skill in the art to have interchangeably employed the inorganic beads of Markusch et al. in place of the wood flakes/dust of Cioca et al." In short, the Examiner believes it is obvious to substitute the inorganic beads from the Markusch et al reference for the sawdust and/or wood chips of the Cioca et al reference, and that this substitution results in the presently claimed invention.

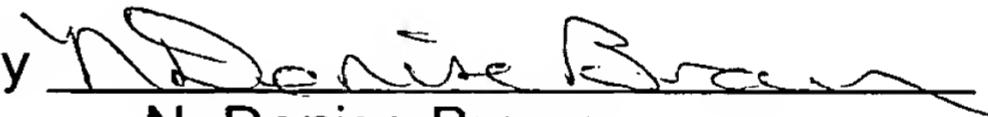
Applicants respectfully disagree. In light of the above amendments to the present claims, this substitution does not result in the presently claimed invention. It

is evident that substituting the inorganic beads of the Markusch et al reference for the sawdust and/or wood chips of the Cioca et al reference results in a process which still requires the chrome shavings of the Cioca et al reference. Chrome shavings are clearly excluded from present Claims 1-9.

Neither the Cioca et al reference or the Markusch et al reference expressly disclose, suggest or provide any hint that inorganic hollow bead of the Markusch et al reference could be substituted for the chrome shavings of the Cioca et al reference. This is essential, however, to arrive at the presently claimed invention from this combination of references. Accordingly, the present invention is not *prima facie* obvious in view of the Cioca et al reference with the Markusch et al reference.

In view of the above amendments and remarks, Applicants respectfully submit that the presently claimed invention is not properly rejected under 35 U.S.C. 103(a) as being obvious over the Cioca et al reference combined with the Markusch et al reference. It is respectfully requested that this rejection be withdrawn and Claims 1 and 4-10 be allowed.

Respectfully submitted,

By 
N. Denise Brown
Agent for Applicants
Reg. No. 36,097

Bayer MaterialScience LLC
100 Bayer Road
Pittsburgh, Pennsylvania 15205-9741
(412) 777-3804
FACSIMILE PHONE NUMBER:
(412) 777-3902

f:\shared\kpl\db39.ame